### CONCEPT PROTOTYPE FOR FEASIBILITY AND MARKET EVALUATION

### **PROJECT GOAL:**

To create a concept prototype / demo vehicle to demonstrate product concepts simultaneously and serve as a QFD tool to assess market value by fleet drivers and managers.

### **TARGET CONCEPTS:**

- 1) Top 2 automated 9-10 and 10-9 shifts
- 2) <u>AutoSplitter</u> splitter shifts automated in all lever positions
- 3) <u>AutoStick</u> assisted lever shifts in all gears plus automated splitter shifts
  - a) Option 1
  - b) Option 2

### **AUTOSTICK POSSIBLE VARIATIONS**

- a) No "lever-sense" switch
- b) With "lever-sense" pad switch
- c) with mainshaft speed sensor (risk, devel needed)
- d) Manual "up-down" switch
- e) "a)" or "b)" with simple "desired gear" display
- f) any with AutoSelect type gear display
- g) mechanical sensing of stick position
- h) mechanical blocking of stick position

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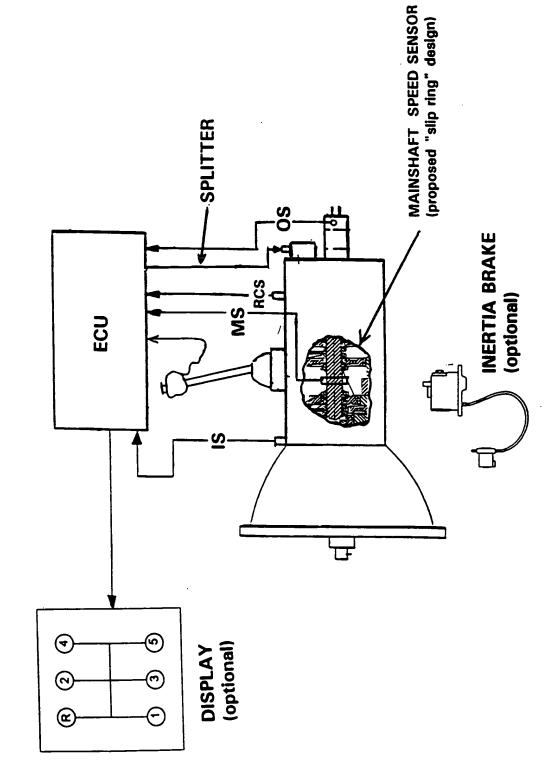
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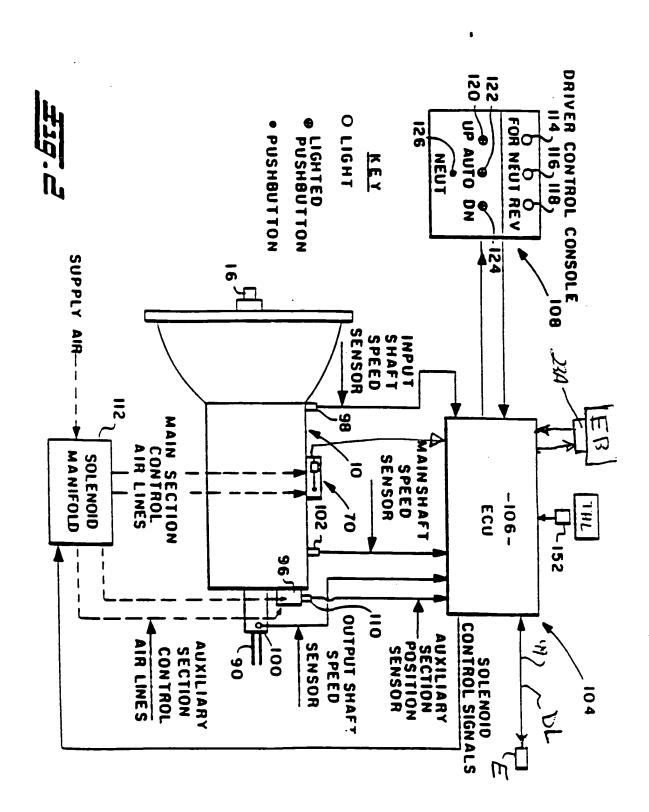
### **PROJECT TIMING**

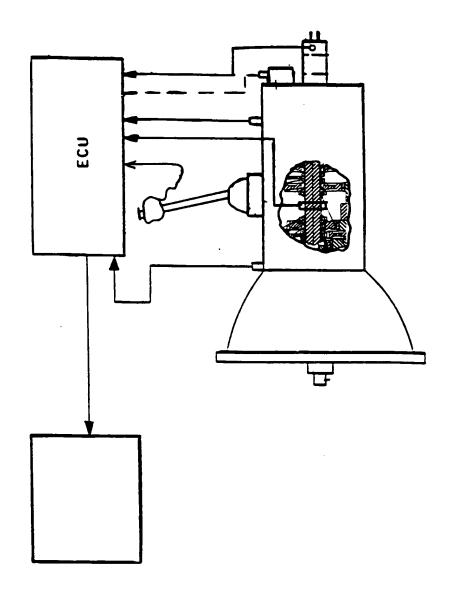
	Task		Duration
1)	Build vehicle and design software		2 months
2)	Software integration and devel.		3 months
	>> First demo to TCONA		at 5 months
3)	Demonstrate to fleets, review results, revise, and re-demo		3 months
	T	otal Duration	8 months

TOTAL PROJECT COST = \$350,000

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### **AUTOSTICK POSSIBLE VARIATIONS**

- a) No "lever-sense" switch, no mainshaft speed sensor
- b) With "lever-sense" pad switch, no mainshaft speed sensor
- c) No "lever-sense" switch, with mainshaft speed sensor
- d) With "lever-sense" switch and mainshaft speed sensor
- e) Manual "up-down" switch
- f) "a)" or "b)" with simple "desired gear" display
- g) any with AutoSelect type gear display
- h) mechanical sensing of stick position
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